

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A honeycomb structure comprising:

a plurality of through channels separated by porous partition walls and extending in an axial direction of the honeycomb structure,

wherein all of said through channels have plugging portions, respectively that plug alternately at either one end of the honeycomb structure or its opposite end in a checkered flag pattern, and

wherein at least one slit per through channel is formed in the vicinity of the plugging portion of the partition walls surrounding the respective through channels, ~~each slit having a length that is at least twice the width wherein a width of each slit is in a range from 0.2 to 1 mm, and a length of each slit is from 1 mm to a length which is the shorter of (a) 30 mm and (b) 1/2 of a length of the honeycomb structure.~~

2. (Original) The honeycomb structure according to claim 1, wherein said at least one slit is linearly formed in an axial direction to which the through channels extend.

3. (Canceled)

4. (Previously Presented) The honeycomb structure according to claim 1, wherein a width of each slit is in a range of from 0.4 to 0.8 mm, and a length of each slit is from 2 mm to a length which is the shorter of (a) 15mm or (b) 1/4 of a length of the honeycomb structure.

5. (Original) The honeycomb structure according to claim 1, wherein the number of slits per through channel in the vicinity of an outer peripheral portion is larger than that located in a central portion from a peripheral side of the honeycomb structure.

6. (Original) The honeycomb structure according to claim 1, wherein the length of the slit in the vicinity of the outer peripheral portion is longer than that located in a central portion from a peripheral side of the honeycomb structure.

7. (Original) The honeycomb structure according to claim 1, wherein the width of the slit in the vicinity of the outer peripheral portion is wider than that located in a central portion from a peripheral side of the honeycomb structure.

8. (Original) The honeycomb structure according to claim 1, wherein the width of the slits varies from slit to slit.

9. (Previously Presented) The honeycomb structure according to claim 1, wherein an oxidation catalyst is carried on at least in the vicinity of the slits.

10. (Previously Presented) The honeycomb structure according to claim 1, whose partition walls have filterability,

wherein the honeycomb structure, when used as a filter, filters particulate materials included in a dust-containing fluid.

11. (Previously Presented) The honeycomb structure according to claim 1, wherein a sectional shape of the through channel is one of triangular, quadrangular, hexagonal, or circular.

12. (Previously Presented) The honeycomb structure according to claim 1, wherein a major crystal phase of the honeycomb structure is made of one of cordierite, silicon carbide, silicon nitride, alumina, mullite, or lithium aluminum silicate (LAS).

13. (Withdrawn) A method for manufacturing a honeycomb structure comprising a plurality of through channels separated by porous partition walls and extending in an axial direction of the honeycomb structure, wherein all of said through channels have plugging portions, respectively that plug alternately at either one end of the honeycomb structure or at an opposite end of the honeycomb structure in a checkered flag pattern, and wherein at least

one slit per through channel is formed in the vicinity of the plugging portion of the partition walls surrounding the respective through channels, each slit having a length that is at least twice the width, which method comprises the step of:

jetting a fluid onto a honeycomb structure to form at least one slit per through channel in the vicinity of the plugging portions of the partition walls before or after firing a green honeycomb structure.

14. (Withdrawn) The method according to claim 13, wherein the fluid is one of compressed air, water vapor, or water.

15. (Withdrawn) A method for manufacturing a honeycomb structure comprising a plurality of through channels separated by porous partition walls and extending in an axial direction of the honeycomb structure, wherein all of said through channels have plugging portions, respectively that plug alternately at either one end of the honeycomb structure or its opposite end in a checkered flag pattern, and wherein at least one slit per through channel is formed in the vicinity of the plugging portion of the partition walls surrounding the respective through channels, which method comprises the step of:

irradiating a honeycomb structure with a laser beam to form at least one slit per through channel in the vicinity of the plugging portions of the partition walls.

16. (Previously Presented) An exhaust gas purification system for filtering particulate materials containing carbon as a major component in a dust-containing fluid, the system comprising:

a honeycomb structure comprising a plurality of through channels separated by porous partition walls and extending in an axial direction of the honeycomb structure, wherein all of said through channels have plugging portions, respectively that plug alternately at either one end of the honeycomb structure or its opposite end in a checkered flag pattern, and wherein at least one slit per through channel is formed in the vicinity of the plugging

portion of the partition walls surrounding the respective through channels, for use as a filter for filtering the particulate materials, each having a length that is at least twice the width; and heating means for burning the particulate materials filtered by the honeycomb structure to regenerate a filterability,

wherein said at least one slit per through channel of the honeycomb structure are closed by deposition of the filtered particulate materials, the slits having been closed are open by burning the particulate materials deposited with a heat at time of regeneration treatment thereof, and at least some of non-burnable materials deposited in the honeycomb structure are discharged from the honeycomb structure by a flow of the dust-containing fluid at a time when slits are reopened.

17. (Previously Presented) The exhaust gas purification system according to claim 16, wherein the heating means is one of an electric heater, a burner using a gas or liquid fuel, a microwave generation apparatus, or heating means for raising an exhaust gas temperature by burning discharged non-burnt fuel components in the exhaust gas of an internal combustion engine with an aid of a catalyst reaction.

18. (Previously Presented) The honeycomb structure according to claim 10, wherein the dust-containing fluid is an exhaust gas of an internal combustion engine in communication with the honeycomb structure.

19. (Previously Presented) The honeycomb structure according to claim 16, wherein the dust-containing fluid is an exhaust gas of an internal combustion engine in communication with the honeycomb structure.

20. (Previously Presented) An exhaust gas purification system according to claim 16, wherein the non-burnable materials are ashes.

21. (New) The honeycomb structure according to claim 1, wherein the slits are constructed and arranged to accommodate effective discharge of ashes by flow of exhaust gas.